



KARNATAKA TEST HOUSE PVT LTD.

MATERIAL TESTING LABORATORY

NABL Accredited Laboratory as per ISO/IEC 17025



Ref: KTH/F.AGG/324-570/2013-2014

Date: 06.06.2013

TEST REPORT ON AGGREGATE

(Fine Aggregate)

Name of the Customer* : **The Assistant Executive Engineer**
BBMP, Kodigehalli Sub Division,
Bangalore.

Name of the Contractor* : **Mr. M.R.Girish**
Bangalore.

Name of the Project* : Improvements to Roads, Drains and Asphalting to Roads in Vinayaka
layout, 2nd Main, 2nd Stage, in ward No.7, Byatarayanapura,
Bangalore.

Source of Sample : Samples supplied by the customer

Customer Reference* : Letter No.AEE/KOD.SUB.DIV/72/2013-14 dtd 03.06.2013

No. of Sample : Aggregate – 1No.

Sample Received on : 04.06.2013

Technical Reference : IS : 2386 Part I to VIII– 1963 (.Reaffirmed-2002) and IS : 383 – 1970

Sieve Analysis of Fine Aggregate

Sl. No.	Sieve size mm	% Passing	IS : 383 – 1970 Specification				Remarks
			% passing for Zone I	% passing for Zone II	% passing for Zone III	% Passing for Zone IV	
1	10	100	100	100	100	100	Falls in Zone –II as per table 4 of IS-383 – 1970.
2	4.75	96.48	90 – 100	90 – 100	90 – 100	95 - 100	
3	2.36	83.12	60 – 95	75 – 100	85 – 100	95 - 100	
4	1.18	60.25	30 – 70	55 – 90	75 – 100	90 - 100	
5	0.600	36.22	15 – 34	35 – 59	60 – 79	80 - 100	
6	0.300	8.91	5 – 20	8 – 30	12 – 40	15 to 50	
7	0.150	2.43	0 – 10	0 – 10	0 – 10	0 to 15	

* As furnished by the customer

For KARNATAKA TEST HOUSE PVT. LTD.

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S. B. M. P.

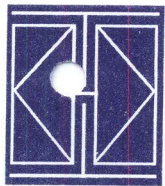
Assistant Executive Engineer,
Kodigehalli Sub Division,
BBMP, Bangalore.



(SREENIVASA.C)
TECHNICAL MANAGER

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MATERIAL TESTING LABORATORY

778/44, Gokul 1st Stage, 2nd Phase, 8th Cross, Triveni Road,
Yeshwanthpur, Bangalore - 560 054.

Tel.: 23378383 Telefax : 23375326, E-mail : kthblr@gmail.com Website : www.karnatakatesthouse.com

Ref: KTH/SDBC/BBMP/324-574/2013-2014

Date: 06.06.2013

TEST REPORT ON SEMI DENSE BITUMINOUS CONCRETE (SDBC)

Name of the Customer : **The Assistant Executive Engineer,**
BBMP, Kodigehalli Sub Division,
Bangalore.

Name of Work* : Improvements to Roads, Drains and Asphaltting to Roads in Vinayaka
layout, 2nd Main, 2nd Stage, in ward No.7, Byatarayanapura,
Bangalore

Source of Sample : Sample supplied by the customer.

Customer Reference* : Letter No.AEE/KOD.SUB.DIV/72/2013-14 dtd 03.06.2013Sample

Received on : 04.06.2013

Identification* : Sample No.1

Technical Reference : IS 73 :1992 (Reaffirmed-1998) and MORT&H-
Specification 4th Revision

a) Gradation for Bituminous Concrete (SDBC)

Sl. No.	Sieve size mm	% Passing	Specification as per MORT&H (Section 500, Table 500-15) Grade-2 % by wt.passing
1	13.2	100	100
2	9.50	95.60	90 - 100
3	4.75	48.90	35 - 51
4	2.36	26.35	24 - 39
5	1.18	18.67	15 - 30
6	0.60	15.22	-
7	0.30	10.30	9 - 19
8	0.15	7.40	-
9	0.075	3.55	3 - 8

b) Bitumen Content of Bituminous Concrete (SDBC)

Sl. No.	Description	Test Values	Remarks
1	Weight of Bitumen mix	1000 grams	Bitumen content satisfies MORT&H Specification Which is minimum of 5%
2	Weight of aggregate after extraction of bitumen	950 grams	
3	Weight of Bitumen	50 grams	
4	Bitumen content %	5.0 %	

*As furnished by the customer.

For KARNATAKA TEST HOUSE PVT. LTD.

[Signature]
Assistant Executive Engineer,
Kodigehalli Sub Division,
Yeshwanthpur Zone, B.B.M.

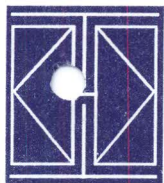


[Signature]
(SREENIVASA.C.)
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Tel.: 23378383 Telefax : 23375326, E-mail : kthblr@gmail.com Website : www.karnatakatesthouse.com

Ref No. : KTH/WMM/324-573/2013-2014

Date: 06.06.2013

TEST REPORT ON WET MIX MACADAM

Name of the Customer* : **The Assistant Executive Engineer**
BBMP, Kodigehalli Sub Division,
Bangalore.

Name of the Contractor* : **Mr. M.R.Girish**
Bangalore.

Name of the Project* : Improvements to Roads, Drains and Asphaltting to Roads in
Vinayaka layout, 2nd Main, 2nd Stage, in ward No.7,
Byatarayanapura, Bangalore.

Source of Sample : Samples supplied by the customer

Customer Reference* : Letter No.AEE/KOD.SUB.DIV/72/2013-14 dtd 03.06.2013

Sample Received on : 04.06.2013

Technical Reference : MORT&H Specification (Fourth revision)

SIEVE ANALYSIS

Sl.No.	Sieve size mm	% Passing (Obtained gradation)	Specification as per MORT&H (Section 400, Table 400-11) % by wt. passing	Remarks
1	53	100	100	Sample confirms to the MORT&H Specification of (Section 400, Table 400-11)
2	45	95.68	95-100	
3	26.5	89.24	-	
4	22.4	79.01	60-80	
5	11.2	55.92	40-60	
6	4.75	38.79	25-40	
7	2.36	27.88	15-30	
8	0.60	15.90	8-22	
9	0.075	3.70	0-8	

Sl. No.	Test Conducted	Results	Specification as per MORT&H (Section 400, Table 400-10) % by wt. passing
1.	Combined Flakiness Index Elongation Index (%)	25.23	Shall not be more than 30%

* As furnished by the customer.

For KARNATAKA TEST HOUSE PVT. LTD.

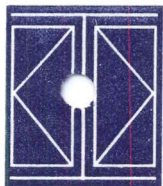
Assistant Executive Engineer.
Kodigehalli Sub Division
Yelahanka Zone, B.B.
Bangalore.



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TECHNICAL MANAGER

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Ref: KTH/ST/324-571/2013-2014

Date: 06.06.2013

TEST REPORT ON STEEL BARS

Name of the Customer* : **The Assistant Executive Engineer**
BBMP, Kodigehalli Sub Division,
Bangalore.

Name of the Contractor* : **Mr. M.R.Girish**
Bangalore.

Name of the Project* : Improvements to Roads, Drains and Asphaltting to Roads in Vinayaka
layout, 2nd Main, 2nd Stage, in ward No.7, Byatarayanapura,
Bangalore.

Source of Sample : Samples supplied by the customer

Customer Reference* : Letter No.AEE/KOD.SUB.DIV/72/2013-14 dtd 03.06.2013

Nature of Sample : Reinforcement steel - 8mm .

Sample Received on : 04.06.2013

Technical Reference : Tensile IS: 1786 – 1985, IS: 1608–1995 (Reaffirmed–2000)
Bend & Re-bend IS: 1786 – 1985 & IS: 1599 – 1985
(Reaffirmed–2000)

Grade of Steel : Fe-415

TENSILE TEST :

Dia (mm)	8	Limits as per IS : 1786-1985, Gr. Fe 415
Weight / unit length (kg/m)	0.379	8mm – 0.367 Min
0.2% proof Stress (N/mm ²)	448.90	415 Min
Tensile Strength (N/mm ²)	565.70	10% More than actual 0.2% proof stress but not less than 485 N/mm ²
% Elongation (on 5.65 √A.G.L)	18.2	14.5 Min.

BEND TEST :

Sl. No.	Dia (mm)	Mandrel diameter	Angle of bend	Observations
1.	8	3 dia	180°	No cracks observed. Passes the test.

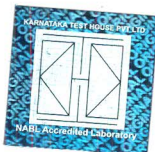
REBEND TEST :

Sl. No.	Dia (mm)	Mandrel diameter	Observations
1.	8	5 dia	No cracks observed. Passes the test.

* As furnished by the Customer.

For KARNATAKA TEST HOUSE PVT. LTD.

Assistant Executive Engineer.
Kodigehalli Sub Division
B.B.M. Zone, B.B.M.



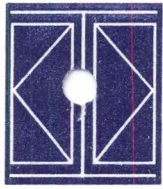
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Ref: KTH/CEMENT/324-572/2013-2014

Date: 03.07.2013

PHYSICAL TEST REPORT ON CEMENT

Final 28 days

Source of sample : Supplied by the Customer.
 Type of cement* : Ordinary Portland Cement (OPC)
 Brand of cement* : Coramandal 53 Grade.
 Condition of sample : Good
 Customer reference* : Letter No.AEE/KOD.SUB.DIV/72/2013-14 dtd 03.06.2013
 Sample received on : 04.06.2013.
 Period of test : 04.06.2013 to 02.07.2013.
 Name of the customer* : **The Assistant Executive Engineer**
 BBMP, Kodigehalli Sub Division,
 Bangalore.
 Name of the Project* : Improvements to Roads, Drains and Asphaltting to Roads in Vinayaka
 layout, 2nd Main, 2nd Stage, in ward No.7, Byatarayanapura, Bangalore.
 Technical reference : IS: 4031(Part I-VI) 1988 (Reaffirmed-2000) & IS: 12269-1987.

Sl. No.	Test Conducted	Results	IS : 12269-1987 Stipulation	Remarks
1	Normal consistency	27.5 %	Not specified	-
2	Initial setting time	198 minutes	Shall not be less than 30 minutes	P
3	Final setting time	320 minutes	Shall not be more than 600 minutes	P
4	Compressive strength (Average of three results) a. 72+1h (3 days) b. 168+2h (7 days) c. 672+4h (28 days)	28.11 MPa 39.25 MPa 56.70 MPa	Shall not be less than 27.0 MPa Shall not be less than 37.0 MPa Shall not be less than 53.0 MPa	P P P
5	Fineness (By Blaine's air permeability method)	288.20 m ² /kg	Shall not be less than 225 m ² /kg	P
6	Soundness (Le-chatlier's method)	0.60 mm	Shall not be more than 10 mm	P

*As furnished by the Customer P: Passes IS requirement F: Fails IS requirement

For KARNATAKA TEST HOUSE PVT. LTD.

Assistant Executive Engineer.
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P



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